

CLAIMS

1. A process for the preparation of an emulsion of an organo-functional polysiloxane comprising mechanically emulsifying a silanol-functional polysiloxane (I) in water in the absence of any basic or acidic catalyst for silanol polycondensation, adding an organofunctional silane of the formula  $X-A-Si(R)_n(OR')_{3-n}(II)$ , where X represents an organic functional group; A represents a divalent organic linkage; each R represents a hydrocarbyl or substituted hydrocarbyl radical; each R' represents hydrogen or an alkyl or acyl group; and  $n = 0, 1$  or  $2$ , to the aqueous phase of the resulting emulsion and reacting the  $-OR'$  groups of (II) with the silanol groups of the polysiloxane (I) to form the organo-functional polysiloxane.
2. A process according to Claim 1, wherein the silanol-functional polysiloxane (I) is emulsified in the presence of a non-ionic surfactant.
3. A process according to Claim 1 or Claim 2, wherein the silanol-functional polysiloxane (I), at least one surfactant and water are continuously fed to a high shear mixer in such proportions as to form a viscous oil in water emulsion which is continuously withdrawn from the mixer and is diluted before addition of the organofunctional silane (II).
4. A process according to any of Claims 1 to 3 wherein the organic functional group X of silane (II) is an amino group.
5. A process according to any of Claims 1 to 4 wherein each group R' of silane (II) is a methyl radical.
6. A process according to Claim 5 wherein the organofunctional silane is 3-aminopropyl trimethoxy silane.

7. A process according to any of Claims 1 to 6 wherein a cationic surfactant is added to the emulsion no later than the addition of the organofunctional silane (II).
8. A process according to any of Claims 1 to 7 wherein a base is added to the emulsion to catalyse the reaction of the –OR' groups of (II) with the silanol groups of the polysiloxane (I).
9. A process according to any of Claims 1 to 8 wherein the organofunctional silane (II) and the silanol-functional polysiloxane (I) are reacted at a temperature below 40°C.
10. An emulsion of an organo-functional polysiloxane prepared by the process of any of Claims 1 to 9, characterised in that the emulsion contains less than 2% by weight cyclic polysiloxane based on the total weight of polysiloxane in the emulsion.